2010

Evaluating the Impact of the UN Convention on the use of Electronic Communications in International Contracts on Domestic Contract Law: The Singapore Example

Eliza MIK

Singapore Management University, elizamik@smu.edu.sg

EVALUATING THE IMPACT OF THE UN CONVENTION ON THE USE OF ELECTRONIC COMMUNICATIONS IN INTERNATIONAL CONTRACTS ON DOMESTIC CONTRACT LAW
- THE SINGAPORE EXAMPLE

Eliza Mik, PhD LLM (Sydney)

"The focus of the Convention is to facilitate 'paperless' means of communication by offering criteria under which they can become equivalents of paper documents, but the Convention is not intended to alter traditional rules on paper-based communications or create separate substantive rules for electronic communications."[1]

INTRODUCTION

The United Nations Commission on International Trade Law (UNCITRAL) Convention on the Use of Electronic Communications in International Contracts (CUECIC or Convention)[2] was adopted on 23 November 2005.[3] Its essential objective is to establish uniform rules intended to "remove obstacles to the use of electronic communications in international contracts, including obstacles that might result from the operation of existing international trade law instruments, with a view to enhancing legal certainty and commercial predictability."[4] The Convention relies on the UNCITRAL Model Law on Electronic Commerce (MLEC),[5] which constitutes an e-commerce flagship project dating back to 1995. It also resembles UNCITRAL's Convention on Contracts for the International Sale of Goods (CISG), in terms of scope of application, principles of statutory interpretation and declarations of variations by ratifying countries.[6] Unlike the CISG, which governs only sales of goods, the CUECIC covers all communications pertaining to the formation or performance of a contract – irrespective of its subject matter.[7] Singapore is the first Asian country to accede to the Convention and the second country globally.[8] Apart from the international aspect of such accession, Singapore also decided to implement some of the Convention's provisions into domestic law. The resulting complications can serve as a note of caution to any state whose contract law – like that of Singapore – is based on the common law. Accordingly, most of the observations made in this article remain valid for countries with similar jurisdictions.

This article takes a critical look at the CUECIC. It argues that contrary to the declaration made in the opening quote above, the Convention does in fact alter classic rules of contract formation and creates a

[1] United Nations Commission on International Trade Law (UNCITRAL) Secretariat, "Explanatory Note on the United Nations Convention on the Use of Electronic Communications in International Contracts", para 48, available at http://www.uncitral.org/pdf/english/texts/electcom/06-57452_Ebook.pdf [hereinafter Explanatory Note]

[2] Convention on the Use of Electronic Communications in International Contracting, Nov. 23, 2005, U.N. Doc. A/60/21, Annex [hereinafter CUECIC].

[3] The Convention enters into force on the first day of the month following the expiration of six months after the date of deposit of the third instrument of ratification, acceptance, approval or accession, Article 23(1). As of 30 April 30, 2011, the following countries signed the Convention: Central African Republic, China, Colombia, Iran, Lebanon, Madagascar, Montenegro, Panama, Paraguay, Philippines, Republic of Korea, Russian Federation, Saudi Arabia, Senegal, Sierra Leone, Sri Lanka. Signing the convention only indicates an intention to consider its ratification rather than consent to be bound by it. Two countries have ratified it: Honduras and Singapore. See: www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2005Convention_status.html

[4] Explanatory Note, supra note 1, para. 45.

[5] UNCITRAL Model Law on Electronic Commerce with Guide to Enactment 1996, with Additional Article 5 bis as Adopted in 1998, U.N. Sales No. E.99.V.4 (1999), available at http://www.uncitral.org/pdf/english/texts/electcom/05-89450_Ebook.pdf (last visited Jan. 15, 2012) [hereinafter UNCITRAL MLEC Guide].

[6] For a detailed description of the procedural and international aspects of the CUECIC, see Charles H. Martin, "The UNCITRAL Electronic Contracts Convention: Will it be Used or Avoided?", 17 Pace Int'l L. Rev. 261 (2005).

[7] See Sieg Eiselen, "The Interaction between the Electronic Communications Convention and the United Nations Convention on the International Sale of Goods", in The United Nations Convention on the Use of Electronic Communications in International Contracts 333 (A.H. Boss & W. Kilian ed., 2008).

[8] Singapore acceded to the Convention on 7 July, 2010. UNCITRAL, Status 2005 - United Nations Convention on the Use of Electronic Communications in International Contracts, http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2005Convention_status.html (last visited Jan. 15, 2012).

separate regime for electronic transactions. Exposing some contradictions in the commentary accompanying the Convention, this article focuses on its implications for domestic contract law only.[9] It does not aim to present a detailed one-by-one description of the Convention's provisions or discuss its impact on the effectiveness or desirability, if any, of harmonization efforts in the area of international trade or contract law (electronic or otherwise). Assumedly, much of the critique that followed the CISG, especially regarding its uniform application,[10] could be repeated here. The emphasis is not on how the Convention relates to other bodies of law on an international level but on how – in certain circumstances – it affects domestic contract law. It is impossible, however, to evaluate the impact of the Convention without evaluating the Convention itself. Logically, if any of its solutions or assumptions are inadequate, their impact will be disruptive rather that facilitating. The discussion commences with a brief explanation of the Convention's goals, its scope and its underlying principles. Next, the "validation" of electronic transactions is presented alongside an evaluation of the (alleged) obstacles to e-commerce. The article proceeds with a brief critique of the harmonization efforts in the area of e-commerce and the creation of a parallel regime for electronic contracts. The implementation of some CUECIC provisions in Singapore's Electronic Transaction Act 2010 is introduced. In particular, the interaction between traditional principles of contract law and the CUECIC "solutions" is illustrated on the basis of Article 10, which affects the time of contract formation.

A DUALITY OF GOALS – A SOURCE OF CONFUSION

The CUECIC amalgamates two related, yet separate goals. One is the removal of obstacles to electronic commerce in international instruments, the other is the facilitation of electronic contracting. It can be suspected that it is this duality of goals that constitutes the source of any difficulties in applying or, in fact, understanding, the provisions of the Convention. At the outset of the preparatory works each goal existed in parallel.[11] The aim was to create an instrument that would "modernize" existing international conventions, particularly trade-related ones, which came into being before the advent of electronic communications. The reasoning was that it is easier to enact one convention to "update" multiple instruments rather than amending individual instruments separately. Seemingly, the declaration "to remove obstacles to electronic commerce" pertains to this very objective. Concurrently, the Working Group also decided to prepare a new convention dealing with electronic contracting in general[12] s– a goal much wider in scope than "updating" international instruments. As a result, the CUECIC modestly aims at alleviating problems in applying other conventions in an electronic environment while, at the same time, ambitiously regulating the process of electronic contract formation and performance.

[9] Most comments regarding the implementation of the CUECIC on a domestic level apply to any country whose contract law is based on common law.

[10] See generally Vivian Grosswald Curran, "The Interpretive Challenge to Uniformity", 15 J.L. & Com. 175 (1995); Andrew Phang & Yeo Tiong Min, "The Impact of Cyberspace on Contract Law", in The Impact of the Regulatory Framework on E-Commerce in Singapore 39, 56-57 (Seng Kiat Boon Daniel ed., 2002), available at http://www.lawnet.com.sg/legal/ln2/comm/PDF/The_impact_of_the_regulatory_framework_on_e_commerce_in_SG.pdf (last visited Jan. 15, 2012).

[11] See UNCITRAL, "Legal Aspect of Electronic Commerce: Legal Barriers to the Development of Electronic Commerce in International Instruments Relating to International Trade", U.N. Doc. A/CN.9/WG.IV/WP.94 (Feb. 11, 2002).

[12] See UNCITRAL, "Legal Aspects of Electronic Commerce: Electronic Contracting: Provisions for a Draft Convention", U.N. doc. A/ CN.9/WG.IV/WP.95 (Sept. 20, 2001).

The first goal is reflected in Article 20, which offers to remove some of the legal obstacles to e-commerce under existing international instruments.[13] It states that the provisions of the Convention apply to the use of electronic communications in connection with the formation or performance of a contract to which any of the number of conventions listed in Article 20 apply, such as the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York Convention). Article 20 does not, however, formally amend any international convention, treaty or agreement and does not provide an authentic interpretation of any other international instrument.[14] Its effect is that by ratifying the Convention, except as otherwise declared, a State automatically undertakes to apply its provisions to electronic communications exchanged in connection with any of the conventions listed in paragraph 1 of Article 20 or any other convention, treaty or agreement to which a State is or may become a contracting State.[15] Interestingly – and this is where the two goals seemingly overlap - with regards to communications relating to contracts covered by other international instruments, the Convention also offers substantive rules that allow those instruments to operate in the electronic environment.[16] It is those substantive rules that constitute the main source of problems and create uncertainty. It is unclear whether any substantive provisions concerning electronic contracting are in fact necessary for the application of other conventions. For example, the CUECIC will apply to enforcement lawsuits under the New York Convention. The latter requires an "original" arbitration agreement to be proffered for enforcement of a foreign arbitral award. Unquestionably, the replication of "originals" in the electronic environment is a welcome facilitation.[17] It is not immediately apparent, however, how issues such as invitations to treat and the regulation of the time of contract formation assist in the operation of this instrument. Moreover, the existence or provision of "originals" is not a question of contract law but of evidence or procedure. The "formation or performance" of a contract[18] requires neither paper nor originals or signatures. It appears that the goal of removing obstacles to electronic commerce in international instruments is not necessarily aligned with that of regulating electronic contracting. After all, these "obstacles" mainly pertain to the paper-based nature of some legal requirements. Substantive provisions regulating, for example, the time of contract formation, are of a different nature than those prescribing formal requirements. There is nothing inherently wrong with one international instrument having two separate objectives. Problems, however, will arise if the respective areas of regulation do not fully overlap.[19] The regulation of electronic contracting may require different provisions (if any) than those aiming to "modernize" international instruments.

---

[13] The Italian delegation noted the

> (…) absence, among the international legal instruments surveyed, of an instrument for which the proposed omnibus agreement would reach its intended general purpose. All the surveyed legal instruments, in one way or another, seem to require either no action or a very specific action that could not be confined to the mere establishment of the principle of the electronic equivalent, whenever the terms "writing", "signature" and "document" are used.

UNCITRAL, "Legal Barriers to the Development of Electronic Commerce in International Instruments Relating to International Trade: Compilation of Comments by Governments and International Organizations", para. 9, U.N. Doc. A/CN.9/WG.IV/WP.98 (July 17, 2002).

[14] Explanatory Note, supra note 1, para. 289.

[15] Id. para. 290; Of the international conventions listed in Article 20(1), Singapore is party to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards and the United Nations Convention on Contracts for the International Sale of Goods.

[16] See UNCITRAL Working Group on Electronic Commerce on the Work, , Rep. on its 43d Sess., Mar. 15-19, 2004, para. 51, U.N. Doc. A/CN.9/548 (Apr. 1, 2004).

[17] See CUECIC, supra note 2, art. 9(4)

[18] See id. art. 1.

[19] See, e.g., Explanatory Note, supra note 1, para. 287. It was pointed out that UNCITRAL should "identify common elements between removing legal barriers to electronic commerce in existing instruments and a possible convention on electronic contracting."

Apparently, the drafters spent little time discussing the foundations of the CUECIC, going straight into a discussion of its detailed provisions.[20] Work on the Convention was expedited by copying many of its the provisions from the UNCITRAL Model Law on Electronic Commerce (MLEC).[21] A reading of the explanatory notes reveals a lack of a fully theorized framework relating not only to the Convention's goals but also to the manner in which they are to be achieved. Sometimes the primary goal is described as the "international harmonization of law in the area of electronic commerce,"[22] sometimes as "validati[ng] the use of electronic communications in international trade."[23] This underlying confusion is further reflected in statements, which describe the Convention as an instrument designed to adapt various laws to electronic commerce,[24] whereas the title of the Convention and some commentary thereto state that it specifically applies to contract law only. "The law" encompasses statutory law, "judicially created law" and other procedural law.[25] A broad interpretation of the term "law" also derives from the explanatory notes, which – speaking in a contractual context – refer to "the law that applies . . . in accordance with the relevant rules of private international law."[26] If, as its title suggests, the Convention pertains to communications relating to contracts, the impact of the Convention on such other law may not always be easy to determine.

SCOPE: THE "ELECTRONIC ELEMENT"

Further difficulties in applying the Convention will result from its extremely wide scope. According to Article 1, the CUECIC applies to the use of electronic communications in connection with the formation or performance of a contract between parties whose places of business are in different States. It governs communications related to an existing or future contractual relationship: from invitations to make offers and pre-contractual inquiries to notices of termination or subsequent amendments of a contract. "Electronic communications" connote communications made by means of "data messages," which are defined as "information generated, sent, received or stored by electronic, magnetic, optical or similar means, including, . . . electronic data interchange, electronic mail, telegram, telex or telecopy."[27] The scope of the CUECIC is therefore very wide. It is not confined to an electronic manner of transmission but extends to situations where a contractual statement is stored in an electronic format such as where a CD is placed in an envelope and delivered by hand.[28] Admittedly, with the exception of face-to-face dealings and exchanges of paper letters by traditional mail, practically all communications at a distance contain an "electronic element" as they involve the intermediation of computers and data networks.[29] Consequently, almost all communications in international trade are caught within the ambit of the Convention.

Interesting situations arise in the case of "mixed communications," where only one transacting party avails itself of an electronic method of communication or where the contracting process involves both traditional and "electronic" methods. A contract may have been formed by traditional means but

[20] Dieter Hettenbach, Das Übereinkommen der Vereinten Nationen über die Verwendung elektronischer Mitteilungen bei internationalen Verträgen [The United Nations Convention on the Use of Electronic Communications in International Contracts] 23 (2008). See also Francesco G. Mazzotta, "Notes on the United Nations convention on the Use of Electronic Communications in International Contract and its Effects on the United Nations Convention of Contracts for the International Sale of Goods", 33 Rutgers Computer & Tech. L.J. 251, 252 (2007) (observing that it took "only" six sessions to prepare the Convention).

[21] UNCITRAL MLEC Guide, supra note 5.

[22] Amelia H. Boss, "Introduction", in The United Nations Convention on the Use of Electronic Communications in International Contracts, supra note 7, at 1, 3.

[23] Id. at 4.

[24] Id. at 3.

[25] Explanatory Note, supra note 1, para. 139.

[26] Id. para. 141.

[27] CUECIC, supra note 2, art. 9 4 (b), (d).

[28] Explanatory Note, supra note 1, paras. 93, 95.

[29] Curt M. White, Fundamentals of Networking and Data Communications 351 (6th ed. 2011).

subsequent communications are conducted electronically.[30] It is not clear whether a single electronic message would bring all preceding and subsequent communications within the scope of the CUECIC, even if they lack an electronic element or whether the Convention would apply to this single communication only. If the latter was the case, there could be transactions where some of the communications fall under the CUECIC regime whereas others are governed by traditional rules. If the former was the case, then the sending of a single email during negotiations otherwise conducted exclusively by traditional communications would trigger the applicability of the CUECIC and subsume all communications relating to the transaction under the modified regime. Consequently, the time of contract formation resulting from a classic exchange of letters (i.e. no electronic element) would still be evaluated on the basis of provisions which presume the electronic character of the interaction. In sum, the breadth of the terms "electronic communications" and "data message" has some undesirable side-effects, such as having two different regimes applying to communications within the same transaction or subsuming traditional communications under an electronic regime.

TECHNOLOGY NEUTRALITY AND FUNCTIONAL EQUIVALENCE

The CUECIC relies on the concepts of technology and media neutrality as well as on so-called functional equivalence.[31] Technology neutrality means that the Convention covers "all factual situations where information is generated, stored or transmitted in the form of electronic communications, irrespective of the technology or medium used."[32] Its provisions are neutral in that they "do not presuppose the use of any technology in particular."[33] Although both media and technology neutrality are regarded as "guiding principles" and serve as important components of most arguments justifying the CUECIC's solutions neither concept appears clear and fully conceptualized. Media neutrality is often difficult to distinguish from technological neutrality. Both refer to the alleged independence of legal principles from the technologies and media by means of which parties manifest agreement. Both assume that legal principles should withhold technological change and not lock the law into a particular technology. They also prohibit the discrimination of electronic methods of communication and prescribe treating them at par with traditional methods.

Unquestionably, law should withhold technological change. There should be no need to regulate anew whenever a new communication method is introduced. In this sense, technology neutrality must be applauded. It must be observed, however, that some legal principles may not be – by their very nature – technology neutral. After all, even the offer and acceptance model has developed around a specific method of communication: the post. Moreover, many legal principles implicitly presume the existence of paper as a physical carrier,[34] i.e. they are not media neutral. It appears questionable whether there are two discrete concepts. Media neutrality may be regarded as a subset of technology neutrality as it relates to physical carriers only,[35] whereas technology neutrality seems to be a broader concept referring to methods of transmission in general. If technology neutrality is not present in traditional contract law, should it serve as a guiding principle in the regulation of electronic contracting? If technology neutrality is understood as proclaiming the principle that the laws should apply identically irrespective of the technology used, then – why is there a need to have a convention governing electronic contracting? Should it not be possible to apply the existing laws in their present form? But, as indicated, existing laws may not be technology or media neutral. The notion of technology neutrality seems to lead to a circular argument. The solution to this theoretical conundrum will largely depend on how the exact scope of the Convention is defined: does

[30] Hettenbach, supra note 20, at 41.
[31] Explanatory Note, supra note 1, paras. 46-53.
[32] Id. para. 47.
[33] Id.
[34] José Angelo Estrella Faria "Online Contracting: Legal Certainty for Global Business – The New U.N. Convention on the Use of Electronic Communications in International Contracts", 39 UCC L.J. 25 (2006).
[35] Explanatory Note, supra note 1, para. 48.

it encompass contract law (or laws pertaining to contractual relationships) only or does it relate to "the law" in general.

Interestingly, despite frequent declarations to the contrary, many of the Convention's provisions that affect contract law are not technology neutral in the sense that they are either specifically tailored to a particular technology or presuppose specific technological features of a particular communication method. Most of the substantive provisions introduced to "facilitate electronic contracting" are in fact technology-specific. An example is Article 11 (Invitations to Make Offers), which states that:

> A proposal to conclude a contract made through electronic communications which is not addressed to one or more specific parties but is generally accessible to parties making use of information systems (including proposals that make use of interactive applications for the placement of orders through such systems) is deemed to be an invitation to make offers, unless it clearly indicates the intention of the party making the proposal to be bound in case of acceptance.

Accordingly, a presumption is established that statements made on websites are not binding. It is unclear , however, why statements made on websites should interpreted differently than the statements made in newspapers or verbally. It is the content of a statement and the intention conveyed thereby – not the method of its communication, manner of expression or the number of addressees – that must be analyzed to determine its legal effect. Statements to the effect that such default rule creates "transparency in trading practices"[36] fail to convince. It was argued that in accordance with the principle of media neutrality, "the solution for online transactions should not be different from the solution used for equivalent situations in a paper-based environment."[37] It cannot be overemphasized that no such presumption exists in the "paper-based environment." The solution presented in the Convention is different. Article 11 not only modifies traditional rules, but is tailored to specifically regulate contracts concluded on websites.

Another cornerstone of the Convention is "functional equivalence." Functional equivalence is discussed in relation to the fulfilment of formal requirements and the creation of electronic equivalents of paper-based concepts such as "writing" and "signatures."[38] Aiming to replicate real-world concepts electronically and to enable the uniform application of legal principles to all technologies and methods of communication, functional equivalence relies on an analysis of the "purposes and functions of the traditional paper-based requirement with a view to determining how those purposes or functions could be fulfilled through electronic-commerce techniques."[39] Upon closer analysis, however, it becomes apparent that functional equivalence is not only difficult to achieve but may indirectly contradict technology neutrality.[40] Creating electronic equivalents of "writing" and "signatures" often results in a redefinition of the original concepts and in equipping them with qualities they do not originally possess. For example, Article 9, which establishes the requirements for functional equivalents of signatures, prescribes that electronic signatures not only indicate a party's intention but also identify the signatory. This approach overlooks the fact that traditional signatures need not be legible and need not identify the signatory.[41] Due to the liberal approach as to what can constitute a signature, neither a biometric link nor a name is required.[42] Accordingly, the electronic equivalent of "signature" differs from the original concept as it presupposes a function that the

[36] Estrella Faria, supra note 34, at 11.
[37] Explanatory Note, supra note 1, para. 199.
[38] Id. para. 50.
[39] Id. para. 133.
[40] See generally Chris Reed, "Online and Offline Equivalence: Aspiration and Achievement" 18 Int'l J.L. & Info. Tech. 248 (2010).
[41] Holly K. Towle, "E-Signatures – Basics of the US Structure", 38 Hous. L. Rev. 921, 986 (2001).
[42] UNCITRAL MLEC Guide, supra note 5, para. 54.

original does not necessarily fulfil. Prescribing the criteria for a functional equivalent may also result in the imposition of a specific technology, if only one technology can fulfil these criteria. If the "electronic equivalent" of a signature must identify a person, only those technologies that can achieve such identification are admissible. This raises some complex issues pertaining to remote authentication and, possibly, the necessity of a biometric association, which is difficult to replicate in an electronic environment. Consequently, the co-existence of functional equivalence and technology or media neutrality appears questionable.

Interestingly, functional equivalence seems to work only "one way:" it is rarely noted that many electronic phenomena do not have real-world equivalents. An example is hypertext, which disperses content among multiple files and often hides the very source of such content.[43] Its characteristics are difficult to replicate – or even compare to anything – in the world of paper. The facilitation of e-commerce and the application of contract law principles to electronic transactions may not always require the creation of an electronic equivalent of a real-world concept (such as writing) but the finding of a real-world equivalent of a concept that exists only in the "electronic world." On a more general level, it could also be said that if a legal principle is technology (or media-) neutral, functional equivalents are superfluous, as the principle should accommodate new communication methods without the need for separate constructs. Seemingly, the very regulation of electronic contracting contradicts technology neutrality as it implies that contracts formed by electronic means require separate treatment. Contracts are usually regulated due to their subject matter or the weaker position of one contracting party – not because of the manner they are formed.[44]

VALIDATION AND REMOVAL OF OBSTACLES

Article 8, titled "Legal recognition of electronic communications" proclaims: "[a] communication or a contract shall not be denied validity or enforceability on the sole ground that it is in the form of an electronic communication." Consequently, the CUECIC prohibits (a) any discrimination on the basis that a contract originated in electronic form and (b) any disparity of treatment between electronic communications and paper documents.[45] These prohibitions continue the theme of technology neutrality. At the same time, as indicated above, some provisions enhance such disparity by creating technology-specific rules. The best example if the aforementioned Article 11, which contains a presumption that statements on websites are not legally binding. This presumption does not exist in relation to statements made in paper documents. This is done in the name of "enhancing certainty" and "removing obstacles" to electronic contracting. While it cannot be said that the electronic environment does not create any problems, it is incorrect to state that contract law contains any inherent obstacles to electronic commerce or that electronic contracting requires "validation." This is, unfortunately, a common misunderstanding. A simple illustration is the process of contract formation. There are many ways of forming a contract: parties may negotiate orally, in writing or they may engage in specific conduct. In common law systems, such as Singapore,[46] as long as there is consideration, certainty and an intention to create legal relations, the promises made during the formation process are binding and enforceable.[47] The new transacting environment changes nothing in this regard: intention, consideration, as well as certainty, are required for

[43] Dan L. Burk, "Proprietary Right in Hypertext Linkages", 1998 J. Info. L. & Tech, http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/1998_2 (last visited Jan. 15, 2012).
[44] Donnie L. Kidd, Jr. & William H. Daughtrey, Jr., "Adapting Contract Law to Accommodate Electronic Contracts", 26 Rutgers Computer & Tech. L.J. 215, 269 (2000).
[45] Explanatory Note, supra note 1, para. 129.
[46] Singapore follows the common law of contract. See Application of English Law Act (Cap. 7A) (Rev. ed. 1994) (Sing.).
[47] The Law of Contract 255 (M Furmston ed., 4th ed. 2010).

contracts formed by electronic means and for contracts formed in traditional ways. Contract law generally disregards the manner in which intention is communicated.[48] In the words of one author:

> [T]he existing rules and principles need not be changed, let alone replaced or abrogated. . . . [T]he difficulty is one of application rather than substantive content as such. This is, perhaps, not wholly surprising as, by their very nature, common law as well as equitable rules and principles will tend to be stated at a very general level of abstraction or universality, thus leaving much scope for actual as well as potential application to a large variety of contexts, including one as ostensibly radical as cyberspace.[49]

Another popular misapprehension is that there exist many legal requirements prescribing the use of traditional paper-based documentation, which constitute a "significant obstacle to the development of modern means of communication."[50] It is, however, difficult to find such "legal requirements" in contract law, at least in common law countries. Formalities, such as writing or signatures, may be required by law (other than contract law)[51] or by the contracting parties themselves. Contract law itself is "form-free." The electronic form does not pose an obstacle to valid on-line transactions because the substantive rules of contract law permit intention to be manifested in any manner. There being no general requirement for contracts to be in writing or to be signed, formal requirements are an exception not the rule.[52] Accordingly, the absence of "paper," "writing" and "signatures" does not affect the validity or enforceability of contracts or pose an obstacle to their conclusion by means of emails, instant messengers or on websites. After all, "[i]f an oral agreement should suffice for the formation of a valid and binding contract, then surely an agreement reached with the use of electronic communications should be afforded the same recognition."[53] In sum, contracts can be formed and performed without any formalities.[54]

The "problem" of formalities may be also analyzed from the perspective of the Convention's second goal to facilitate the application of international instruments. The first convention that comes to mind is the CISG. However, in the words of one author, "[t]he issue of electronic communications in the context of the CISG has always been addressed through interpretation."[55] Given the absence of any form requirements in the CISG[56] and the ease of its adaptation to the electronic environment,[57] it is not immediately apparent how the CUECIC assists in its operation.[58] A detailed reading of the CISG reveals that it can function without any adaptations and need not be supplemented with any additional rules to facilitate or validate electronic communications.[59]

---

[48] See Reed, supra note 40, at 256

[49] Phang & Yeo, supra note 10, at 40-41.

[50] Explanatory Note, supra note 1, para. 50.

[51] See, e.g., Law of Property Act, 1925, 15 & 16 Geo. 5, c. 20 (U.K.); Civil Law Act (Cap. 43) (Rev. ed. 1985) (Sing.)

[52] The Law of Contract, supra note 47, at 559. See also Andrew Murray, Information Technology Law: The Law and Society 414 (2010).

[53] Eiselen, supra note 7, at 343.

[54] "As a general rule, no formalities are required for the creation of a contract in English law." Stephen Smith & P.S. Atiyah, Atiyah's Introduction to the Law of Contract 96 (6th ed. 2006).

[55] Juana Coetzee, "Securing the Future of Electronic Sales in the Context of International Sales", 11 Vindobona J. Int'l Com. L. & Arb. 11, 14 (2007).

[56] Convention on Contracts for the International Sale of Goods art. 11, July 1, 1964, 1489 U.N.T.S. 3 [hereinafter CISG]. Under the CISG, "writing" may be required if a country made a declaration to this effect under CISG art 96.

[57] CISG-Advisory Council Opinion No. 1, Electronic Communications Under CISG (Aug. 15, 2003), available at http://cisgw3.law.pace.edu/cisg/CISG-AC-op1.html. See also Herbert Bernstein & Joseph Lookofsky, Understanding The CISG in Europe: A Compact Guide to the 1980 United Nations Convention on Contracts for the International Sale of Goods 38 (2d ed. 2003).

[58] Eiselen, supra note 7, at 342.

[59] Schlechtriem & Schwenzer: Commentary on the UN Convention on the International Sale of Goods (CISG) 241

In light of the above it could be argued that some of the obstacles the Convention is trying to remove do not exist – at least not in contract law. Statements that contracts can be formed electronically merely state the obvious. A simple prohibition to discriminate on the basis of the "electronic" form would have sufficed. From a contract law perspective, there is no further need for validation, confirmation of effectiveness or admissibility. Declarations to the effect that the Convention "validates" electronic contracting are misleading in the sense that they imply that validation is needed in the first place. It must be re-emphasized that there is no reason to deny validity or legal effect to a statement or the resulting contract (if any) solely on the ground that it is in electronic form. This simple truth is also reflected in Clause 11(1) of the Electronic Transactions Act (ETA) "For the avoidance of doubt, it is declared that in the context of the formation of contracts, an offer and the acceptance of an offer may be expressed by means of electronic communications". This wording constitutes a confirmation of an existing rule – not the creation of a new one.

Leaving aside contract law, it must be acknowledged that existing legislation (including international instruments) may be inadequate or "outdated" in that it does not contemplate the use of electronic communications.[60] It is true that new legislation, or an amendment of existing legislation, might be necessary to provide a legal infrastructure for electronic commerce.[61] It is equally true, however, that the need to modernize legislation must be distinguished from the need to modernize contract law. "Updating" statues must be distinguished from "updating" contract law. This division is drawn in the New Zealand ETA, which is restricted in its application to requirements imposed by statute. In Singapore, the ETA applies to both "written law and common law:"[62] Caution must therefore be exercised when evaluating statements that law lags behind the revolutionary developments in information technology. This statement is largely valid when it comes to some written laws, which contain provisions not easily amenable to a wide and flexible interpretation. The statement is not valid when it comes to "pure" contract law in common law systems such as England or Singapore.

HARMONIZATION AND PARALLELISM

Once acceded to, the Convention becomes part of national law but governs only international transactions. The regime created by the Convention remains separate and independent from the regime governing domestic transactions. Upon accession, a Contracting State is not obliged to implement the CUECIC at a domestic level. It is, however, possible to transpose some provisions into national regulations governing electronic commerce, usually referred to as "Electronic Transactions Acts."[63] This has been the case in Singapore and is also being planned in Australia,[64] which seems next in line to accede to the Convention. It was argued that "while the Convention and . . . domestic laws operate in different dimensions or spheres of application, electronic commerce is best served by a body of law that is seamless and makes

(Ingeborg Schwenzer ed., 3d ed., 2010); Charles H. Martin, "The Electronic Contracts Convention, The CISG and New Sources of E-commerce Law", 16 Tul. J. Int'l & Comp. L. 467, 475 (2008).

[60] Tana Pistorius, "Contract Formation: a Comparative perspective on the Model Law on Electronic Commerce", 15 Comp. & Int'l L.J. S. Afr. 129,130 (2002).

[61] Harry S.K. Tan, "The Impact of Singapore's Electronic Transactions Act on the Formation of E-contracts", 9 Electronic Comm. L. Rev. 85, 85 (2002).

[62] Info-communications Development Authority (IDA) & Attorney-General's Chambers (AGC), "Joint IDA-AGC Review of the Electronic Transactions Act, Stage II: Exclusions from the ETA under Section 4", LRRD No.2/2004, at 15, 16, http://www.ida.gov.sg/doc/Policies%20and%20Regulation/Policies_and_Regulation_Level2/papers/ETA_Review_-_Exclusions_under_s_4_consultation_paper.pdf (last visited Jan 15, 2012).

[63] See Electronic Transactions Act 1999 (Cth) (Austl.).

[64] Attorney-General R McClelland introduced the Electronic Transactions Amendment Bill 2011 into the House of Representatives. Once the amendments are enacted in all jurisdictions, the Government will move to accede to the Convention. See Media Release, Attorney-Genreal for Austratlia, Updating Electronic Transactions Legislation (Feb. 9, 2011) http://www.ag.gov.au/www/ministers/mcclelland.nsf/Page/MediaReleases_2011_FirstQuarter_9February2011-Updatingelectronictransactionslegislation.

no distinction between local and international systems."[65] The problems inherent in cascading the CUECIC solutions to domestic law are particularly pertinent given ASEAN's recommendation to use the Convention not only as a tool to harmonize e-commerce legislation on a regional level but also to apply its provisions in domestic transactions.[66] The application of the Convention to international contracts must therefore be distinguished from situations, where a contracting state decides to amend or create domestic e-commerce laws to reflect its provisions. In the second instance, a number of legal solutions, which assume an international and strictly commercial character of the transaction, will apply to domestic transactions. Consequently, while achieving uniformity between international and domestic contract law, the implementation of the CUECIC solutions creates a division within domestic contract law, with special rules coming into operation whenever a transaction is concluded by electronic means.[67]

Some critical observations are inevitable. Parallel regimes are tolerable and common at an international level. This is already the case in those countries, which adopted the CISG to govern international sales of goods. Although the CISG becomes part of domestic law, it only governs international transactions, i.e. contracts with a cross-border element. The solutions in the CISG do not affect domestic transactions. Accordingly, there is a difference between the set of rules governing domestic transactions and the set of rules governing international transactions. Reflecting a historical evolution of national legal systems there is no international uniformity in contract law at domestic level, i.e., every state has its own system of contract law. It is not immediately apparent why electronic contracting should be harmonized if traditional contracting is not. It is unclear why a new and untested legal instrument designed to govern international transactions should serve as a template for domestic law reform. It is also questionable whether the facilitation of e-commerce at an international level requires that e-commerce laws be harmonized at a national level.[68] After all, the same could be said about contract law in general: one uniform international contract law that also applied to domestic transactions would facilitate worldwide trade and provide unprecedented legal certainty. This would happen if every country in the world adopted the CISG and subsequently amended its national laws to reflect its principles. This, however, is not the case as every country has its own, domestic contract law. Statements to the effect that ASEAN member countries should amend domestic electronic commerce and contract laws to be consistent with the CUECIC "to ensure that there is only one law for both domestic and international contracts"[69] are therefore surprising and unrealistic.[70] They seem to ignore that "the territoriality of laws will always be a real issue so long as sovereignty of independent states (and legal systems) remain."[71] Unquestionably, there is "a real danger that parties will be taken by surprise by differences in the legal treatment of their contracts which turn on

[65] Boss, supra note 22, at 7.

[66] Chris Connolly, "Using the Electronic Communication Convention to Harmonise National and International Electronic Commerce Laws: An ASEAN Study", in The United Nations Convention on the Use of Electronic Communications in International Contracts, supra note 7, at 315, 320. Please note that the term "harmonization" is used in the sense of "unififormization." See generally Martin Boodman, "The Myth of Harmonization of Laws", 39 The Am. J. Comp. L. 699 (1991).

[67] Hettenbach, supra note 20.

[68] Connolly, supra note 66, at 316. See also Ter Kah Leng, "Towards Uniform Electronic Contracting Law", 18 Sing. Acad. L.J. 234, 235 (2006) (stressing that it is undesirable to have two regimes, one for domestic and one for international contracts).

[69] Connolly, supra note 66, at 320. See also IDA & AGC, "Joint IDA-AGC Review of the Electronic Transactions Act, Stage 1: Electronic Contracting Issues", LRRD No.1/2004, at 5, http://www.ida.gov.sg/doc/Policies%20and%20Regulation/Policies_and_Regulation_Level2/IDA-AGC_electronic_contracting_issues/ETA_Review_-_Electronic_Contracting_Issues_Consultation_Paper.pdf (last visited Jan. 15, 2012) (emphasizing that the aim was harmonization of how international contracts are entered into).

[70] For a general discussion of international conventions and the goal of uniformity, see Sir John Hobhouse, "International Conventions and Commercial Law: the Pursuit of Uniformity" 106 L. Q. Rev. 530, 530-35 (1990).

[71] Phang & Yeo, supra note 10, at 54, 56-57. The authors remained "sceptical of any efforts to harmonise substantive rules of contract law generally. The divergence of legal doctrines, cultures and traditions in different countries should not be underestimated."

the characterization of their contracts as international or domestic."[72] The same danger exists in any international transaction where the fact that one of the parties is from a different jurisdiction is not immediately noticeable.

Another important point must be made before proceeding. The Convention, while aiming to harmonize and streamline the international aspects of electronic contracting, is not directly designed to harmonize domestic electronic contracting or contract law in general. Quite the opposite: it is frequently emphasized that its provisions aim not to interfere with domestic contractual principles.[73] Working Group IV itself emphasized that the Convention should not affect substantive contract law.[74] Moreover, Article 19(2) permits States to exclude from the scope of the Convention any matters it may specify by means of a declaration.[75] Article 19 has accumulated extensive critique as destroying the aim of certainty and uniformity in international electronic transactions.[76] Both the "limited interference" and the mechanism in Article 19 specifically recognize the idiosyncrasies of national legal systems of the contracting States. It is therefore difficult to assume that the Convention requires, or envisages, general uniformity – both at the national and the international level.

Harmonization aside, some broader questions come to mind: Should transactions concluded by electronic means be governed by a separate set of rules? Is there a need for a parallel regime for electronic contracts? After all, any technology-related alteration of a principle of contract law spawns two separate regimes: one for contracts formed in a traditional manner, another for contracts formed electronically.[77] Interestingly, UNCITRAL was "mindful of the need to avoid creating a duality of regimes for contract formation: a uniform regime for electronic contracts under the new Convention and a different, not harmonized regime, for contract formation by any other means."[78] Despite such declarations, the Convention introduces substantive rules tailored to the electronic environment, which are inconsistent with the traditional principles. This is done "where substantive rules are needed in order to ensure the effectiveness communications"[79] or to address "the potentially higher risk of mistakes being made in real-time or nearly instantaneous transactions . . . with automated message systems."[80] These substantive rules are exemplified by Article 10 (time and place of dispatch and receipt of electronic communications), Article 11 (invitations to make offers), and Article 14 (errors in electronic communications). The surprising thing about these provisions is their very existence. By establishing rules that apply only when a communication is made by electronic means, these provisions do in fact create a separate regime. Their existence not only contradicts the principle of technology neutrality but runs counter to the many

---

[72] Chong Kah Wei & Chao Suling, "United Nations Convention on the Use of Electronic Communications in International Contracts – A New Global Standard", 18 Sing. Acad. L. J. 116, 145 (2006).

[73] See, e.g., Explanatory Note, supra note 1, para. 175. When preparing article 10 and debating whether electronic acceptances should be subject to rule of receipt or PAR,

> Different legal systems use various criteria to establish when a contract is formed and UNCITRAL took the view that it should not attempt to provide a rule on the time of contract formation that might be at variance with the rules on contract formation of the law applicable to any given contract (see A/CN.9/528, para. 103; see also A/CN.9/546, paras. 119- 121).

See also Explanatory Note, supra note 1, para. 130.

[74] UNCITRAL, "Draft Report of the Working Group on Electronic Commerce on the Word of Its 42nd Session: Addendum", U.N. Doc. A/CN.9/WG.IV/XLII/CRP.1/Add.7 (Nov. 21, 2003).

[75] See Explanatory Note, supra note 1, paras. 284, 285.

[76] Coetzee, supra note 55, at 20; Mazzotta, supra note20 , at 265.

[77] The risks of establishing a dual regime, depending on the media being used, has also been a concern expressed by the International Chamber of Commerce. See UNCITRAL, "Legal Aspects of Electronic Commerce: Electronic Contracting: Provisions for a Draft Convention: Comments by the International Chamber of Commerce", U.N. Dec. A/CN.9/WG.IV/WP.96 (Dec. 11, 2001).

[78] Explanatory Note, supra note 1, para. 53.

[79] Id. para. 4.

[80] Id. para. 12.

declarations contained in the literature accompanying the CUECIC – such as "non-interference with domestic law" and, as mentioned above, avoidance of creating a duality of regimes.

SINGAPORE – ACCESSION AND DOMESTIC IMPLEMENTATION

In Singapore, the ETA[81] was first enacted in July 1998 to provide a legal foundation for electronic signatures and to give predictability and certainty to contracts formed electronically. The same month Singapore acceded to the CUECIC,[82] the ETA was repealed and re-enacted. The new ETA came into force on July 1, 2010.[83] Accordingly, Singapore is not only the first Asian nation to accede to the CUECIC but also the first nation to implement some of its provisions at domestic level.[84] It must be emphasized that the ETA is significantly wider in scope than the Convention.[85] It addresses the legal aspects of electronic contracts as well as issues of authentication and non-repudiation, such as the use of specified security procedures (including digital signatures). Moreover, the ETA governs the use of electronic communications in the public sector, the liability of network service providers and the development of remote authentication procedures relying on Public Key Infrastructures. The ETA applies to the interpretation of the written laws of Singapore,[86] unless the context indicates otherwise.[87]

Although the 2010 ETA largely retains the legal framework contained in the 1998 ETA it adds or amends certain provisions dealing with electronic contracting to ensure consistency with the Convention.[88] The following paragraphs briefly introduce those provisions that are relevant to electronic contracting. The 2010 ETA aims to align domestic e-commerce regulations with the Convention. All amendments are perceived as clarifications or necessary facilitations, without which e-commerce cannot flourish.

Time of Formation

Clause 13 of ETA resembles Article 10 of the CUECIC and regulates when and where electronic communications are deemed to have been dispatched or received, thereby directly affecting the determination of the time a contract is formed. Article 10 states:

> (1) The time of despatch of an electronic communication is
> (a) the time when it leaves an information system under the control of the originator or of the party who sent it on behalf of the originator; or
> (b) if the electronic communication has not left an information system under the control of the originator or of the party who sent it on behalf of the originator, the time when the electronic communication is received.

[81] Electronic Transactions Act (ETA) (Cap. 88) (Sing.).
[82] Upon ratification, Singapore declared: The Convention shall not apply to electronic communications relating to any contract for the sale or other disposition of immovable property, or any interest in such property. The Convention shall not apply in respect of (i) the creation or execution of a will; or (ii) the creation, performance or enforcement of an indenture, declaration of trust or power of attorney,that may be contracted for in any contract governed by the Convention.
[83] IDA, Policies& Regulation: Electronic Transaction Act, http://www.ida.gov.sg/Policies%20and%20Regulation/20060420164343.aspx (last visited Jan. 15, 2012).
[84] Singapore was also the first country to enact an Electronic Transaction Act in response to the 1996 Model Law.
[85] For a more detailed discussion about the differences between the Convention and the 1998 ETA, see Chong & Chao, supra note 72.
[86] E.g. Unfair Contract Terms Act (Cap. 396) (Sing.); Contracts (Rights of Third Parties) Act (Cap. 53B) (Sing.)
[87] IDA & AGC, "Joint IDA-AGC Review of the Electronic Transactions Act Proposed Amendments", para. 2.16.3 (June 30, 2009), available at http://www.ida.gov.sg/doc/Policies%20and%20Regulation/Policies_and_Regulation_Level2/20060424112136/ETA_RR%2830June09%29.pdf.
[88] Id. para 2.3.6

> (2) The time of receipt of an electronic communication is the time when the electronic communication becomes capable of being retrieved by the addressee at an electronic address designated by the addressee.
> (3) The time of receipt of an electronic communication at an electronic address that has not been designated by the addressee is the time when the electronic communication becomes capable of being retrieved by the addressee at that address and the addressee becomes aware that the electronic communication has been sent to that address.
> (4) For the purposes of subsection (3), an electronic communication is presumed to be capable of being retrieved by the addressee when it reaches the electronic address of the addressee. (…)

Before proceeding it must be noted that absent specific provisions in a contract, the governing law is frequently determined by the rules of private international law.[89] The latter require the establishment when and where the contract is concluded. Pinpointing the moment of contract formation is therefore of crucial importance. Interestingly, the Convention applies when a transaction is governed by the law of a Contracting State.[90] When transposed into domestic law, the provisions of Article 10 will therefore overlap with the traditional rules of determining the time of formation – and directly affect the very question whether the CUECIC governs the transaction.

It is trite law that a contract is formed when an acceptance becomes effective. Effectiveness is generally tied to receipt (the receipt rule) or to dispatch (the exception, called the postal acceptance rule).[91] In traditional communications courts spend little time determining the exact moment of formation or defining the words "dispatch" and "receipt," as there is usually only one place or one machine that must be taken into consideration. In electronic communications there may be two machines on each side of the transmission channel and therefore two potential points of contract formation. What does "dispatch" and "receipt" mean in the electronic environment? Defining these terms must at all times be distinguished from determining whether acceptances communicated by electronic means become effective on receipt or on dispatch. Given that the choice between the principle and the exception remains one of the more contentious issues in "e-commerce law"[92] the establishment of a definitive rule would have provided some much anticipated certainty. The more so, that the CISG already does so.[93] Regrettably, the question remains unresolved as UNCITRAL decided not to provide a rule that "might be at variance with the rules on contract formation" in the applicable national law.[94]

The difficulties of defining "dispatch" and "receipt" are best illustrated by email, which involves the sender's mail-client and outgoing mail-server and the addressee's incoming mail-server and mail-client. The exact time of formation depends on whether the server or the client is considered relevant.[95] There may be substantial delays between the time messages enter the server and the moment they are

[89] Explanatory Note, supra note 1, paras. 6, 65; Justin Hogan-Doran, "Jurisdiction in Cyberspace: the When and Where of On-line Contracts", 77 Austl. L.J. 377 (2003).
[90] CUECIC, supra note 2, art. 20.
[91] Henthorn v Fraser [1892] 2 Ch 27; Dunlop v Higgins (1848) 1 HLC 381; Adams v Lindsell (1818) B & Ald 681.
[92] Peter Goodrich, "The Posthumous Life of the Postal Acceptance Rule" (Benjamin N Cardozo School of Law, Working Paper No 127, 2005); Hogan-Doran, supra note 89; Simone Hill, "Flogging A Dead Horse – The Postal Acceptance Rule and Email" 17 J. Cont. L. 151 (2001); Valerie Watnick, "The Electronic Formation of Contracts and the Common Law 'Mailbox Rule'", 56 Baylor L. Rev. 175 (2004); Paul D. Fasciano, Internet Electronic Mail: A Last Bastion for the Mailbox Rule, 25 Hofstra L. Rev. 971 (1997).
[93] CISG, supra note 56, art. 18(2).
[94] Explanatory Note, supra note 1, para. 175.
[95] Technically, servers and clients are processes, not discrete pieces of machinery. In many instances their separation is only logical.

downloaded to the client. Mail-clients are on the parties' computers and therefore under their control.[96] Mail-servers, however, are usually operated by Internet Service Providers (ISPs). In traditional communications, telecommunication carriers and the post are regarded as independent third parties which provide the communication infrastructure.[97] Receipt is generally associated with the arrival of a message at the addressee's machine.[98] When the exception applies, "transmission" commences when letters are placed in the mailbox, which constitutes part of the postal system. The time of formation may vary significantly depending on whether the ISP is treated like the post and the mail-server like a mailbox or whether the ISP is treated transparently, i.e., as belonging to the sphere of the control of each respective contracting party. The second option seems more correct: ISPs cannot be regarded as independent third parties and therefore mail-servers cannot be treated like traditional mailboxes. Each contracting party remains in a contractual relationship with its ISP and – despite having no actual technical control over the mail-server – must assume the perils of its malfunctioning. To claim otherwise would place the risks of operation of the sender's outgoing mail-server on the addressee and the risk of operation of the addressee's mail-server on the sender. This would defy logic and disregard the fact that each party (a) chose to use an ISP and (b) chose the particular ISP. After all, the latter provides a service that, technically, could be undertaken by the parties themselves. Only if Internet connectivity and mail-servers were provided by a universal telecommunications provider, such "ISP" would bear resemblance to the post.[99] Hence, it appears correct to regard the client and the server as one unit and disregard message transfers between mail-clients and mail-servers as well as the ISP's actual technical control over the mail-server.

According to Article 10, "dispatch" occurs when a message leaves an information system under the control of the originator. "Receipt" takes place when a message reaches the addressee's electronic address, which is deemed to occur when it becomes capable of being retrieved by the addressee. Apart from the vagueness of the term "information system," which denotes the "entire range of technical means used for transmitting, receiving and storing information"[100] and the lack of any indication regarding the role of intermediaries[101] (such as ISPs), additional complications derive from the division into "designated" and "non-designated" electronic addresses. Article 10 seems to emphasize the actual control of the communication infrastructure thereby disassociating the ISP from the contracting party. Its verbatim reading implies that it is the mail-client that must be taken into account when determining the moment of dispatch. At the same time, "receipt" is associated with "availability for retrieval," which points to the addressee's mail-server. Consequently, the mail-server is separated from the mail-client in the case of dispatch but treated as one device for the purposes of receipt: dispatch occurs when a message leaves the mail-client but is received when it reaches, or enters, the mail-server! It can be assumed that Article 10 does very little in "clarifying" the law or transposing existing principles onto an electronic environment. Instead, it superimposes an additional layer of uncertainty regarding the actual application of the provision. Supplementing the traditional rules of establishing the time of formation with the provisions proposed by Article 10 will not necessarily result in enhancing the predictability of electronic transactions.

INVITATIONS TO TREAT

Clause 14, like Article 11 of the CUECIC, establishes the default rule that an electronic communication proposing to conclude contracts, which is addressed to the world at large, constitutes an invitation to make offers (i.e., invitations to treat), unless it clearly indicates the intention of the party making the proposal to be bound. As already discussed above, the provision contained in Article 11 is not only tailored

[96] I disregard whether the sender uses a shared computer and whether the mail-client takes the form of a browser, as in the case of web-mail, or a dedicated email application, such as Outlook.
[97] Fasciano, supra note 92, at 995.
[98] Tenax Steamship Co Ltd v Owners of the Motor Vessel "Brinmes" (The Brinmes), [1974] 3 All ER 88, 93.
[99] George B. Delta, Jeffrey H. Matsuura, Law of the Internet, paras. 3-10 (2008).
[100] Explanatory Note, supra note 1, para. 101.
[101] Id. para. 99.

to websites but also creates a presumption that does not exist in traditional contract law. To repeat: whether a statement is binding or not, is solely a question of intention – not manner of expression or method of communication. It is interesting to observe the inconsistency in approach: on some occasions, such as establishing a firm rule regarding when an electronic acceptance becomes effective, any regulation is avoided for fear of creating two separate regimes. On other occasions, technology-specific modifications, such as those contained in Clause 14, are introduced without hesitation. Interestingly, the relevant consultation paper stated that "the best approach to the issue would be to allow normal contract law rules to prevail" and therefore not to adopt any provisions concerning this issue.[102] It remains unclear why the drafters regarded certain problems as worthy of creating technology-specific rules, whereas others (such as meeting disclosure requirements) completely passed under their radar.

AUTOMATION

Copying CUECIC Article 12, Clause 15 asserts that contracts formed through the use of automated systems (e.g., transactions on websites) are valid and enforceable, even though no natural persons had reviewed the action of the systems or output of its operations. Article 12 states:

> A contract formed by the interaction of an automated message system and a natural person, or by the interaction of automated message systems, shall not be denied validity or enforceability solely on the ground that no natural person reviewed or intervened in each of the individual actions carried out by the automated message systems or the resulting contract.

Allegedly, such provision is necessary to "give legal effect to the acts of electronic agents, which are increasingly used in e-commerce."[103] While this provision does not modify any existing rule and is unlikely to cause much confusion, its existence can be regarded as redundant. There is no need to "validate" automated electronic transactions just as there was no need to confirm the possibility to form contracts by means of vending machines. In Thornton Shoe Lane Parking[104] the court stated that the machine was only a presenter of the defendant's offer. By initiating the computer, operators accept that contracts concluded by the computer are binding on them.[105] This is a direct result of the principle that intention can be manifested in any manner and that such intention persist as long as a computer is held out. Contract law is indifferent to the fact that a message was not only transmitted but also generated by a computer. From the objective perspective of a reasonable addressee - the statement is the same.

ELECTRONIC MISTAKE

An interesting concept is introduced by Clause 16 of ETA, which follows CUECIC Article 14. The latter provides that

> (1) Where a natural person makes an input error in an electronic communication exchanged with the automated message system of another party and the automated message system does not provide the person with an opportunity to correct the error, that person, or the party on whose behalf that person was acting, has the right to withdraw the portion of the electronic communication in which the input error was made.

[102] IDA & AGC, supra note 87, para. 2.8.3.
[103] Ter, supra note 68, at 244.
[104] Thornton v Shoe Lane Parking Ltd [1971] 2 QB 163.
[105] Tom Allen & Robin Widdison, "Can Computers Make Contracts?", 9 Harv. J. L. & Tech 25, 46 (1996); Margaret Jane Radin, "Humans, Computers and Binding Commitment", 75 Ind. L. J. 1125, 1128 (2000).

(2) Subsection (1) shall not apply unless the person, or the party on whose behalf that person was acting
  (a) notifies the other party of the error as soon as possible after having learned of the error and indicates that he made an error in the electronic communication; and
  (b) has not used or received any material benefit or value from the goods or services, if any, received from the other party.
(3) Nothing in this section shall affect the application of any rule of law that may govern the consequences of any error other than as provided for in subsections (1) and (2).

The above provision allows for electronic communications to be withdrawn in the event an input error is made by a natural person interacting with an automated message system in the event the system does not allow the person to correct the error. Withdrawal can only occur if certain conditions are met, e.g., the natural person has not received any benefit from the transaction. The relevant provision does not provide a right to "correct" the error. Under the common law position, the contract would be allowed to stand unless the mistake or error must have been obvious to the reasonable party.[106] While the desirability of such provision cannot be questioned in limited circumstances, such as consumer protection legislation, the general principle established therein must be applied with caution. Leaving aside the obvious observation that the provision differs from the classic principles of contract law thereby creating a parallel regime for automated transactions, its main weakness lies in the absence of any statement regarding the legal effects of the withdrawal. Assumedly, whether it would invalidate the entire transaction depends on the nature of the portion withdrawn. It is therefore questionable whether such piecemeal regulation introduces any certainty. As in the case of defining "dispatch" and "receipt," it can add an additional layer of complexity to the traditional analysis. This complexity will derive from the difficulties in interpreting the provision and from its interaction with the principles of contract law.

FINAL OBSERVATIONS

A closer look at the Convention reveals that some of its provisions are prone to introduce further uncertainty into an already complex legal area. The provisions which govern electronic contracting not only contradict technology neutrality, but introduce a parallel contractual regime for contracts formed via modern means of communication. Whether the existence of such distinct set of rules is desirable, constitutes a separate question. It can only be assumed that declarations to the effect that "a duality of regimes must be avoided," should have resulted in an instrument with fewer (if any) substantive rules. After all, the introduction of any provision that interferes with or alters the classic principles of contract law inevitably creates a dual regime. Such "duality" is particularly dangerous when the substantive provisions of the CUECIC are implemented into local e-commerce regulations. It is one thing to have two separate sets of rules for domestic and for international contracts. It is yet another to have a differentiation in legal treatment within domestic contract law. A verbatim implementation of the CUECIC results in a separate set of contractual rules, which apply only when a particular manifestation of intention is transmitted or stored electronically.

Some might question whether the domestic implementation of the CUECIC's substantive provisions really carries the dangerous side-effects indicated above. Responding to such doubts, it must be borne in mind that the process of contract formation, i.e., the initial transacting stages, including negotiations and invitations to make offers, affects the contents of the contract, the time of formation and the contract's very existence. These initial stages are therefore particularly vulnerable to any interference. Even the smallest inconsistency in the formulation of a provision or a minute change in the applicable default rules will send ripple effects across the whole regime of contract law. Any additional complication, such as the application of one of the new provisions of the ETA, will result in increased uncertainty.

[106] Chwee Kin Keong v Digilandmall.com Pte Ltd [2004] SGHC 71 (Sing.).

In light of the above, care must be taken not to be misled by the Convention's rhetoric of "removing obstacles" or "facilitating" international electronic commerce. The latter would be best served by a Convention without any substantive provisions. Leaving aside the question whether its existence contributes to enhancing predictability in international electronic transactions, its implementation at a domestic level must be approached with great caution – if not avoided altogether. One must also remain skeptical about any efforts to harmonize substantive rules of contract law at a national level.[107]

Despite the title of the Convention and the declaration made in Article 1, which refers to communications related to contracts only, the Convention potentially regulates the entire transactional landscape pertaining to contracts, such as statutory requirements and questions of evidence. Some provisions do not directly relate to contract law but are restricted to and necessary for the modification of international instruments. The initial differentiation between the two separate goals the Convention was designed to achieve must therefore be kept in mind.

Legislation resembling the Singaporean ETA should aim at modernizing individual statutes that may contain provisions which are incompatible with technological progress. Such statutes may therefore need to be modernized. Specific contractual issues should, however, be left to common law developments. After all, no international conventions were necessary to adapt contract law to the post or telephone. The latter methods of communication, although at the time of their introduction they appeared quite revolutionary, were easily absorbed into contract law. It cannot be denied that some uncertainty is always present when applying the principles of contract law to novel transacting scenarios – such as those encountered in electronic transactions. Frequently, this uncertainty is the result of a general discomfort with the communication technology in question – not the existence of any obstacles to its use in electronic transactions.

[107] Phang & Yeo, supra note 10, at 54.